

Appl. No.: 10/797,748  
RCE and Amendment dated 04/27/2006

Patent  
51302-00002

### REMARKS/ARGUMENTS

This amendment is being filed in conjunction with a Petition to Withdraw from Issue and a Request for Continued Examination under the provisions of 37 CFR §1.114 and the appropriate fee. Claims 26 and 28-59 were allowed on December 1, 2005 and the claim listing represents the final allowed claims including claim amendments in an examiner's amendment mailed with the Notice of Allowance on December 1, 2005. No claims are amended in this paper.

### Amendments to the Specification

Applicants have discovered errors in the amino acid sequences (SEQ ID NO. 2 and SEQ ID NO. 4) filed with the instant application in the USPTO both in the specification and in the sequence listing. The nucleic acid sequences as filed (SEQ ID NO. 1 and SEQ ID NO. 3) are correct, however the corresponding amino acid sequences have a typographical error wherein ASN residues were identified as ASP.

The typographical error occurred in amino acids 6, 13, 31, 39 and 43 of SEQ ID NO. 2 and amino acids 6 and 13 of SEQ ID NO. 4. As a point of clarification, the DNA codon for ASP is GAC/T and the DNA codon for ASN is AAC/T. Only one amino acid sequence can be generated from each DNA sequence and the correct DNA sequence was originally filed in this application. Therefore the correction of the amino acid sequences in this amendment does not constitute new matter. Applicants assert that the typographic error in the amino acid sequence was an inadvertent error.

A paper copy of a Substitute Sequence Listing containing the corrections to SEQ ID NO. 2 and SEQ ID NO. 4 and a statement, indicating that the Computer Readable form and the paper copy of the Substitute Sequence Listing represent the same listing, are submitted herein. A Computer Readable Form (diskette) is being submitted by Express Mail to Mail Stop Sequence.

Appl. No.: 10/797,748  
RCE and Amendment dated 04/27/2006

Patent  
51302-00002

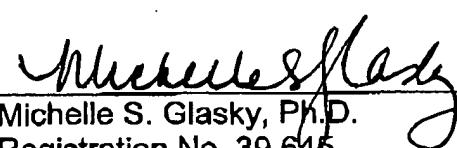
Conclusion

For the foregoing reasons, Applicant believes pending claims 26 and 28-59 are in condition for allowance and respectfully requests that a timely Notice of Allowance be issued in this case.

The Commissioner is authorized to charge any fee which may be required in connection with this Amendment to deposit account No. 50-3207.

Respectfully submitted,

Dated: 4/28/06

  
\_\_\_\_\_  
Michelle S. Glasky, Ph.D.  
Registration No. 39,645

**PRESTON GATES & ELLIS, LLP**  
1900 Main Street, Suite 600  
Irvine, California 92614-7319  
Telephone: (949) 253-0900  
Facsimile: (949) 253-0902

CUSTOMER NUMBER: 45,200

## PATENT

Applicant: Acey  
Serial No.: 10/797,748  
Filed: 09/09/2004  
Title: METAL BINDING PROTEINS AND  
ASSOCIATED METHODS  
Group Art Unit: 1645  
Examiner: Robert A. Wax  
Atty Docket No.: 51302-00002

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**SUBMISSION OF SUBSTITUTE SEQUENCE LISTING, COMPUTER READABLE COPY AND/OR  
AMENDMENT PERTAINING THERETO FOR BIOTECHNOLOGY INVENTION CONTAINING  
NUCLEOTIDE AND/OR AMINO ACID SEQUENCE  
(37 CFR §§ 1.821-1.825)**

Mail Stop Petition  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicants enclose herewith a SUBSTITUTE SEQUENCE LISTING in computer readable (ASCII) form. A paper copy of the SUBSTITUTE SEQUENCE LISTING in compliance with 37 CFR §§ 1.821-1.825 for the nucleotide and amino acid sequences disclosed in the above-referenced application is also submitted herewith.

**STATEMENT THAT COMPUTER READABLE COPY OF  
THE SUBSTITUTE SEQUENCE LISTING IS THE SAME AS THE  
PAPER COPY OF THE SUBSTITUTE SEQUENCE LISTING**

I hereby state:

1. The computer readable (ASCII) form of the SUBSTITUTE SEQUENCE LISTING submitted in this application is the same as the paper copy of the SUBSTITUTE SEQUENCE LISTING to which it is indicated to relate.
2. All papers accompanying this submission introduce no new matter to the accompanying application.

VERIFICATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of the Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

---

Date

---

Michelle S. Glasky  
Registration No. 54,124

CUSTOMER No. 45,200  
PRESTON GATES & ELLIS  
1900 Main Street, Suite 600  
Irvine, CA 92614  
Telephone: (949) 253.0900  
Facsimile: (949) 253.0902

5130200002 corrected.ST25.txt  
SEQUENCE LISTING

<110> MGP Biotechnologies LLC  
Avey, Roger A.  
Mustillo, Michael  
Harpman, Brenton G.

<120> Metal Binding Proteins and Associated Methods

<130> 51302-00002

<140> 10/797,748  
<141> 2004-03-09

<150> 09/948,495  
<151> 2001-09-06

<160> 10

<170> PatentIn version 3.3

<210> 1  
<211> 147  
<212> DNA  
<213> Artemia sp.

<400> 1  
atggactgct gcaagaacgg ttgcacctgt gccccaaatt gcaaatgtgc caaagactgc 60  
aaatgtgca aaggttgtga gtgcaaaagc aacccagaat gcaaatgtga gaagaactgt 120  
tcatgcaact catgtggtttgc tcactga 147

<210> 2  
<211> 48  
<212> PRT  
<213> Artemia sp.

<400> 2

Met Asp Cys Cys Lys Asn Gly Cys Thr Cys Ala Pro Asn Cys Lys Cys  
1 5 10 15

Ala Lys Asp Cys Lys Cys Lys Gly Cys Glu Cys Lys Ser Asn Pro  
20 25 30

Glu Cys Lys Cys Glu Lys Asn Cys Ser Cys Asn Ser Cys Gly Cys His  
35 40 45

<210> 3  
<211> 66  
<212> DNA  
<213> Artemia sp.

<400> 3  
atggactgct gcaagaacgg ttgcacctgt gccccaaatt gcaaatgtgc caaagactgc 60  
aaatgc 66

## 5130200002 corrected.ST25.txt

<210> 4  
<211> 22  
<212> PRT  
<213> Artemia sp.

<400> 4

Met Asp Cys Cys Lys Asn Gly Cys Thr Cys Ala Pro Asn Cys Lys Cys  
1 5 10 15

Ala Lys Asp Cys Lys Cys  
20

<210> 5  
<211> 34  
<212> DNA  
<213> Artificial

<220>  
<223> 5' primer (N-terminal side) designated MT-Not I for PCR  
amplification of Artemia metal binding protein sequences

<400> 5  
acctatgcgg ccgcaaatgg actgctgcaa gaac

34

<210> 6  
<211> 31  
<212> DNA  
<213> Artificial

<220>  
<223> 3' primer (C -terminal side) designated dT-Not I for PCR  
amplification of Artemia metal binding protein sequences

<400> 6  
gcaccaacta gtgccttttt tttttttttt a

31

<210> 7  
<211> 31  
<212> DNA  
<213> Artificial

<220>  
<223> 3' primer (C -terminal side) designated dT-Not I for PCR  
amplification of Artemia metal binding protein sequences

<400> 7  
gcaccaacta gtgccttttt tttttttttt c

31

<210> 8  
<211> 31  
<212> DNA  
<213> Artificial

<220>  
<223> 3' primer (C -terminal side) designated dT-Not I for PCR  
amplification of Artemia metal binding protein sequences

Page 2

## 5130200002 corrected.ST25.txt

<400> 8	
gcaccaacta gtgccttttt tttttttttt g	31
<210> 9	
<211> 33	
<212> DNA	
<213> Artificial	
<220>	
<223> 5' primer containing an Nde I site	
<400> 9	
gctacacacata tgtccatgga ctgctgcaag aac	33
<210> 10	
<211> 31	
<212> DNA	
<213> Artificial	
<220>	
<223> 3' primer containing Sal I site	
<400> 10	
acgaacgtcg acgccttttt tttttttttt a	31